

Art, Virtual Worlds, and the Emergent Imagination



Frontispiece. *Wanderingfictions Story* as part of the *Meta-Dreamer* project at the Golden Thread Gallery, Belfast (2009) Photograph © Denise Doyle

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Far from the immensities of sea and land [...] isn't imagination alone able to enlarge indefinitely the images of immensity? [1]

Introduction

This paper presents a framework for what is termed 'the emergent imagination' that arises out of the transitional spaces created in avatar-mediated online space, and it examines how the contemporary notions of the virtual have changed our framing of the imaginary. According to the philosopher Edward Casey "imagination (in Western thought) is not securely situated in regard to such decidedly different acts as sensory perception and conceptual thinking" [2]. Perhaps this is because "imagining is easy enough to enact as experience, but it is extremely difficult to capture in midair for the purposes of scrutiny and examination" [3]. Neuroscientists Gerard Edelman and Giulio Tononi put forward that "every act of perception is, to some degree, an act of creation, and every act of memory is, to some degree, an act of imagination" [4]. Can distinct neural processes be attributed to the imagination (computational, cognitive)? Can we describe the synaptic process of imagining in virtual space? This paper considers the importance of investigating imaginative experience in relation to the process of artistic creativity and practice and discusses the ways in which the 'virtuality' of avatar-mediated online space impacts on the 'reading' of the artworks created in the space itself. Referring to the heterogeneities of space explored in virtual worlds the paper argues that whilst the virtual remains connected to time, the imagination

becomes connected to space, and through this a new set of time-space relationships in virtual space can be articulated.

Avatar-Mediated Online Space

Virtual worlds include online gaming, MMORPG's (Massively Multiplayer Online Role-Playing Games), MUVE's (Multi User Virtual Environments) and user-generated worlds such as *Second Life*. The breadth of research undertaken in virtual worlds has been reflected in the number of disciplines that are seeing different opportunities for research and particularly in an interdisciplinary context. Since its inception ten years ago artists have been exploring the virtual space of *Second Life* where the act of creating is already mediated through technology. From early works such as *Thirteen Most Beautiful Avatars* (2006) by Eva & Franco Mattes modelled on a reworking of Andy Warhol's print series, to Brian Eno's *77 Million Paintings* (2007) installation recreated in *Second Life*, to more recent works developed on gaming platforms such as *Flower* (2009) and *Journey* (2012) developed by *thatgamecompany* for PlayStation, all point towards a retesting of artistic principles in virtual world spaces.

A whole range of galleries have presented, and supported, or included artworks developed in *Second Life* in their gallery spaces including the Serpentine Gallery, London, the Walker Art

Gallery, Liverpool, and the Eyebeam Gallery in New York, either as part of themed exhibitions or artist-focused exhibitions. A relatively early group of art exhibitions entitled *Kritical Works in SL* were presented during 2008 and 2009 on Kriti Island (that acted as a laboratory space for ongoing artistic and imaginative practice research in *Second Life*) [5]. This brought together a group of artists who were early adopters of the platform: contributing artists included Lynn Hershman, Joseph DeLappe and Paul Sermon. Central to the development of the space was the community of experimental artist practitioners who relied on a particular form of collaborative co-operation. The research began with a grass roots development from connections made within the space itself. As an artist-researcher the main strategy was to create a presence on the platform and invite others to participate. Kriti was also a space for the presentation of the process of thinking in relationship to the key themes of the exhibitions, that of the imaginative potential of the space and the subsequent exploration of the relationship between physical and the virtual spaces. Following the realisation of the exhibitions, interviews were conducted with six of the participating artists and analysed for the artist's insight in the context of creating immersive and interactive experiences in the *Second Life* space. The accepted format of the artist's interview traditionally explores the tacit knowledge base of the artist's experience and draws out any impact on the artistic process. However, a further method was used for the analysis that exposed a previously unacknowledged layer of experience for evaluation, that of the phenomenological method of Imaginative Variation. In this approach, the interviews were analysed to uncover the essence and meaning of an experience, in this case 'the

artist's experience of being a creative practitioner in virtual space'.

What criteria can be used to examine and make sense of the array of artworks produced in *Second Life* and other virtual spaces, and how can the practice undertaken there in the lifetime of the platform be reviewed in the context of contemporary art or New Media practice? What modalities of art are being explored within the space? The concerns appear varied and multi-layered. There is the continuation of the contemporary arts discourse, there is the anarchy of social engagement and participation, and there is the recreation of painted virtual spaces where the issue is either their ability to come to life, or the ability to do the unimaginable, to walk around and be immersed in pictorial space. This play of the imagination incorporates the re-enactment of art and performance events. All of these movements and actions have come about on the *Second Life* platform during the last ten years.

The Art and Science of the Imagination

Recent developments in neuroscience research suggest that we are now able to understand the brain and the workings of the mind in entirely new ways. Fields such as neurophilosophy (Gerald M. Edelman) and neurophenomenology (Antonio Damasio) are questioning our understanding of the world and experience of space and time as well as focusing on our lived and embodied experience. In moving any understanding of consciousness and the imagination forward Edelman argues for the need for what he terms a Global Brain Theory, that we should seek to understand the principles of 'perception, memory, action, and intention' [6]. Edelman's concept of Neural Darwinism has curious resonances for an act of the imagination; the firing of connecting

synapses, the development of plastic neural networks in the brain. Perhaps we could add a fifth 'state' to a Global Brain Theory and seek to understand that most elusive and ephemeral of qualities, that of the imagination itself?

The discovery of mirror neurons in the 1990s may explain the efficacy of virtual world experiences and most particularly those mediated through avatar presence. The virtual embodiment of people as avatars is a term used in many online worlds, with avatar being the Sanskrit word which originally referred to the incarnation of a Hindu god and particularly the god Vishnu [7]. The first use of the term in the context of technology was around 1986 for the graphical representation of participants in the *Habitat* virtual world [8]. However, Tom Boellstorff suggests that 'avatars make virtual worlds real, not actual: they are a position from where the self encounters the virtual' [9]. Artist and writer Patrick Lichty proposed three aspects that contribute to the significance of virtual worlds, that of Affect, Desire, and Mirroring [10]. Recently a study by neuroscientist Shanti Ganesh et al suggests that a greater emotional involvement with one's avatar can be registered in areas of the brain that are noted for self identification from a third-person perspective [11]. The study was conducted with a group of long-term online players of *World of Warcraft* and a non-gaming control group.

Analysing the Kritical Artworks

In his 2009 article, *The Translation of Art in Virtual Worlds*, Lichty outlines a number of interesting questions with respect to artists working between the virtual, and what he terms the *tangible*. He presents four modalities of art in which the modality "refers to the location and

vector direction of the work's relation between worlds" [12]. Lichty suggests there are four modalities of art currently being produced in virtual worlds, the Transmediated, the Evergent, the Cybrid and the Client/Browser work. He explains:

This epistemological "movement" within and between worlds has four basic structures; work that is essentially traditional physical art translated to the virtual, "evergent" work that is physically realized from virtual origins, the virtual itself, designed entirely for the client/browser experience, and "cybrids" that exist concurrently between various modalities [13].

The transmediator according to Lichty "tries to align the tangible and the virtual" [14], and this movement is illustrated by the vector direction of the transmediated work from the physical world to the virtual world. An example of work that is within this category according to Lichty is Marina Abramovic's *Seven Easy Pieces* (2005). An artwork from the Kritical Works exhibition in this category is that of Taey lohe's *Strangers in the Neighbourhood* (2009). lohe was approached to participate in the second phase of the project following her exhibition in Seoul, South Korea entitled *The Lure of the Lawn* (2008). In the installation, which was based on an imagined encounter between two historical figures, the British feminist Mary Wollstonecraft and the Korean landscape artist Na Hyeseok, there was a life-size bed suspended in mid-air in the gallery space itself. For the 2009 exhibition, lohe was invited to explore the transition of the work into the Kriti Island space that developed as a spatial story; when the audience moves through the

space the story is told. The bed disrupts the space, deliberately. The artwork has its original roots in work produced in the physical world and fulfills the definition of Lichty's transmediated work, although through this transmediation the work is transformed and explored in new ways [15]. For example, lohe explains that the opportunity to have the bed as a place that you could lie on was taken when developing the idea on the Island space, something that was not possible in the physical exhibition in Seoul. The immediate experience of the artwork relies on inverting the logic of the physical world, and in particular in playing with scale (the bed and the balls of red thread) and the apparent weightlessness of the bed itself.



Figure 1. *Wanderingfictions Story on the bed* in *Strangers in the Neighbourhood* (2010) © Taey lohe

A second modality of art is that built for the client/browser experience. UK based artist Annabeth Robinson developed *Gestalt Cloud* specifically for the 2009 exhibition and describes the work as:

[A] multi-user installation that invites online social play. When an avatar is within the Cloud's generating 10m^3 space, it reacts by creating cubes engulfing the avatar producing a low resolution 3D cloud

that follows the user about. When a group of four or more avatars are in close proximity, their combined cloud will be rewarded with precipitation, beginning a sequence of change to the space around them [16].

There is real potential within the artwork for encouraging collaboration and the social implications of the shared experience. Very little actually happens unless more avatars are present. Robinson explains that *Gestalt Cloud* came from a body of work, developed over the last few years, where she was attempting to make installations that were designed around the fact that *Second Life* is primarily a social networking platform [17]. The meaning generated by *Gestalt Cloud* emerges directly from the inWorld space itself and in this case, appears self-contained within it. Even the reference to the forest does not take you to the physical world; rather the experience lies in the momentary space created after the rain.

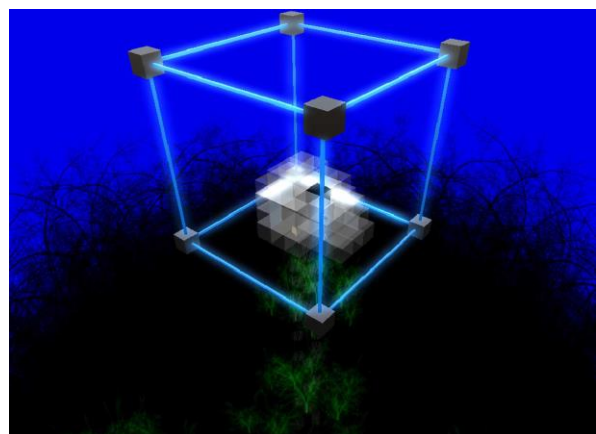


Figure 2. *The Gestalt Cloud rain forming* (2010) © Annabeth Robinson

The semiotics of these two modalities, the transmediated and the client/browser, are as suggested by Lichty "a straightforward affair" [18]. The Cybrids however, according to Lichty "are

less concerned with continuity, but are interested in the differences and distinctions between worlds and scales" [19]. Both the Cybrid and the Evergent works demonstrate a "movement from virtual to tangible, which includes consideration of works existing in simultaneous physical and virtual components, [and] present more complex models" [20]. This complex play within and between worlds, in particular 'the enigmatic liminal works that live between worlds' [21], those spaces that are potent for the imagination, already demonstrate an array of creative potential in the *Second Life* space. My own project entitled the *Meta-Dreamer* (2009) could be considered to be an evergent work based on Lichty's proposition. After reflecting on the work of the performance artist Joseph DeLappe's *MGandhi* series [21] I began working with digital materialization expert Turlif Vilbrandt, [22]. Data was extracted from *Second Life* to create a series digitally materialized objects of my avatar, *Wanderingfictions Story*.



Figure 3. Joseph DeLappe's *MGandhi 1* with *Wanderingfictions Story* as the *Meta-Dreamer* in the background (2010) Photograph © Denise Doyle.

By experimenting with digital processes and the type of material used, attempts were made to represent jade, and clouded glass, amongst other textures. The end result can be seen in the Frontispiece: the qualities of the figure are cloud-like and ethereal as though she (the meta-dreamer) is 'almost there' [22]. *Meta-Dreamer* was presented alongside DeLappe's *MGandhi 1* at the Golden Thread Gallery and can be seen in Fig.3.

The Emergence of Transitional Spaces

The vectors of movement of the four modalities of art as described by Lichty can be considered to denote the directions and creations of meaning between the physical or tangible world, and the virtual world, and movements within and between virtual spaces themselves (see Fig.4). These vectors of meaning are, in the Transmediated artwork, from the physical world to the virtual, and the vector movement of the Evergent artwork, is from the virtual to the physical or the tangible. A third vector can be placed within the virtual world space and denotes a circular and self-referential movement within virtual and imagined worlds themselves. A fourth series of vectors move between the spaces denoted as Cybrid spaces where connections and augmentations of artworks are multiplied and duplicated. However, these vector movements could also be considered to be that of the 'movements of the imagination' itself.

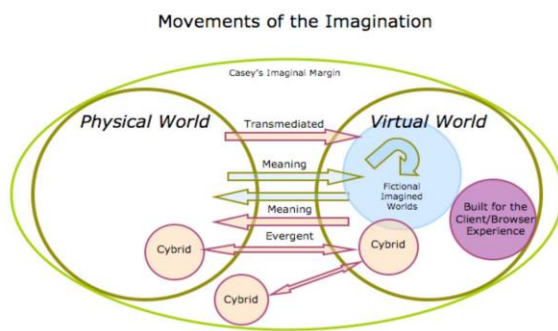


Figure 4. A visual diagram of Movements of the Imagination (2010) © Denise Doyle

If the modalities of art and creation of imaginative effects are compared it appears that spaces in transition provide the movement where meaning is created. Through the research it was found that in the imaginative effects created in the artworks and presented in the virtual world of *Second Life* arise out of four categories of transitional space: the surreal, the fictional/poetic, the emergent, and the spatio-temporal.

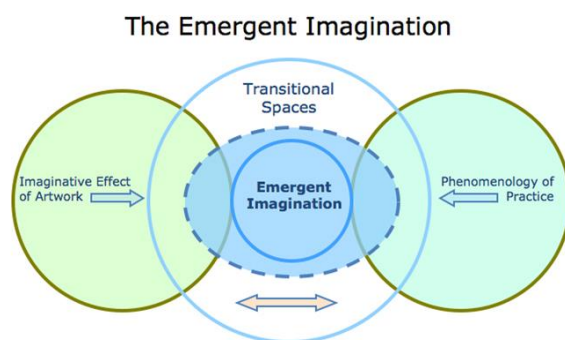


Figure 5. A framework for the Emergent Imagination (2010) © Denise Doyle

An outcome of the research was the development of a new framework for the imagination (presented in diagrammatic form in Fig. 5). 'The emergent imagination' can be seen to emerge from both the heterogeneities of space

created in the imaginative effects of the artworks and in the artist's act of creating through a phenomenology of practice. The transitional spaces are at the centre of the framework itself and out of which 'the emergent imagination' comes into view. The conditions for the appearance of 'the emergent imagination' are seen both in the act of creation and in the outcome of the creative act itself. In the analysis of the imaginative effects of the artworks it was noted how the transitional spaces created suggest the presentation of space as a field of becoming. The heterogeneity of space created has at its base the multi-faceted experience of space and its changing relationship to time. Additionally, the phenomenological account of the artist's experience of creative practice in the *Second Life* space suggests a varied experience of embodiment and imaginative experience [23]. The wide-ranging accounts of the artists indicated the extent to which time, space and time-space relationships were central to this experience. In the creation of the framework for 'the emergent imagination' the experience of embodiment and the associated imagination of the senses may explain the visceral and material responses to the phenomenological experience in virtual space.

Time-Spaces of the Emergent Imagination

It is pertinent to consider Casey's description of imaginal space, imaginal time and the imaginal margin (following his first-person phenomenological study of the imagination) with respect to the framework for 'the emergent imagination'. In describing his experience of imaginal time, Casey writes that in the felt presence, "not only was there no single temporal matrix extending throughout [...] in each instance there was present a vague positioning of given

items of content within a time span" [24]. In describing imaginal space Casey writes "in spite of their diverse and often truncated character, these varieties of spatial expanse were nonetheless intrinsic elements of the imagined content [...] for all such items of specific content are invariably presented as localized, if not strictly located, within imaginal space" [25]. Finally, with respect to Casey's imaginal margin, it is described as "the fading fringe found at the outer limit of specific imagined content [...] being almost entirely featureless, it cannot be given any definite location" [26]. Echoes of the imaginal margin are found in the explanation artist Taeyohe provides of her experience of allowing her mind to drift in the *Second Life* space, not knowing if she sees a half wolf or a half dog at the edges of the world as though she is describing the space of a dream or reverie [27]. With respect to Casey's study, there is no real sense of the positioning of an imaginative experience in time and this is also the same for space. There is no real geography of the imagination in a physical, locatable, Cartesian sense and this is reflected in the heterogeneities of space experienced in avatar-mediated online spaces. A field (rather than a geography) of the imagination may be a more suitable account of the experience.

Doreen Massey, in an essay responding to the work of artist Olafur Eliasson, attempts to illustrate a set of relationships between time and space by using a narrative account of a journey between Manchester and Liverpool. In the process of travelling she suggests, "if movement is reality itself then what we think of as space is a cut through all those trajectories; a simultaneity of unfinished stories" [28]. Further:

Space has its times. To open up space to this kind of imagination means thinking about time and space together. You can't hold places and things still. What you *can* do is meet up with them [...] 'Here', in that sense is not a place on a map. It is that intersection of trajectories [original emphasis] [29].

If each space has a particular time, as Massey implies, then the transitional spaces that have been identified in avatar-mediated online spaces may also have a particular time attached to them. Not only, then, are there heterogeneities of space but also different sets of time-spaces that can also be located in the *Second Life* experience. The time-spaces of 'the emergent imagination' may also share their qualities with mythic time. Of mythic stories, Griffiths writes:

[They] talk time out of mind, charm time and trick time, clogging it or stretching it: fables make time fabulously paradoxical, a stubborn blot on the face of clock-time but true to the time of the psyche, where past present and future are kaleidoscoped [30].

Even Bachelard writes in the 'Dialectics of Duration' (2000) of different levels of temporal experience:

As soon as we had acquired through mediation some skill in emptying lived time of all its excess and ordering the different levels of temporal phenomena into a series [we] saw that between this passing of things and the abstract passing of time there is no synchronism [31].

All of these expressions suggest a plasticity to time as a lived experience, but also to the specificities of time-space relationships.

Conclusion

Sean Cubitt suggests that in online arts it is in the combination of a “spatialisation of time” and “the remaking of actual-virtual relations’ that the peculiar ephemerality of online arts makes new sense” [32]. The very notion that Cubitt expresses here is the very set of relationships discovered to be at the centre of a framework for ‘the emergent imagination’. The analysis of the imaginative effects of the artworks presented in the two virtual (and physical) gallery exhibitions of the *Kritical Works in SL* project demonstrates a mode of artistic exploitation of the particular combination of user-generated and avatar-mediated spaces. These imaginative effects are also indicated in more recent examples such as Journey (2012). These virtual, sometimes liminal and always transitional, spaces that emerge from the artworks are complex and multi-layered. A further analysis of a phenomenology of practice of artists in avatar-mediated online spaces reveals that the imagination is experienced as embodied. A materiality to space is identified through an imagination of the senses that responds to the presence of the (imagined) body of the avatar. Here, the conditions for ‘the emergent imagination’ are best generated in avatar-mediated online spaces, where the experience of space as heterogeneous and where the plasticity of time-space relationships can be articulated.

This paper explored some of the philosophical implications of virtual worlds, through an examination of the concept of the imagination as that concept is seen in light of the pervasiveness

of the virtual in our everyday lives. It is precisely in the generation of ‘the emergent imagination’ in avatar-mediated online spaces that we can best enrich our ‘real world’ lives, by applying some of the emergent experience of the plasticity of time-space relationships and the heterogeneity of space itself to our lives in the world around us.

References and Notes

1. Gaston Bachelard, *The Poetics of Space*, (Boston, Beacon Press, 1994), p.183. Bachelard was, amongst other things, a philosopher of the imagination. As a scientist, there was certainly surprise when he began his series of books on the imagination and matter, following his appointment as a Professor of the History and Philosophy of Science at the Sorbonne.
2. Edward Casey, *Imagining*, (Indiana University Press, 2000), p.19.
3. Casey, 2000, p.4.
4. Gerard M. Edelman & Giulio Tononi, *Consciousness: How Matter Becomes Imagination*, (London, Penguin Books, 2000), p.101.
5. The *Kritical Works in SL* exhibitions were the first of their kind focusing on the curation of a range of virtual works to begin a critical dialogue of the potential of virtual worlds for artistic practice.
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8. Steve Dixon, *Digital Performance: A History of New Media in Theater, Dance, Performance Art, and Installation*, (Cambridge, Massachusetts, MIT Press, 2007), p.259.
9. Boellstorff, 2008, p.129.
10. Patrick Lichty speaking on the *Virtual Doppelgangers: Embodiment, Morphogenesis, and*

Transversal Action Panel, ISEA2011 Istanbul, Sabanci University.

11. Shanti Ganesh, Hein T. van Schie, Floris P. de Lange, Evan Thompson, & Daniel H.J. Wigboldus, How the Human Brain goes Virtual, *Cerebral Cortex*, 21 (12), 2011, pp.2665-2680.

12. Patrick Lichty The Translation of Art in Virtual Worlds. *Leonardo Electronic Almanac*, 18 (12), http://www.leonardo.info/LEA/DispersiveAnatomies/DA_lichty.pdf (accessed February 22, 2013), p.2.

13. Lichty, 2009, p.2.

14. Lichty, 2009, p.5.

15. Lichty 2009, p.5.

16. Annabeth Robinson in Denise Doyle, *Kritical Works in SL II*, (Wolverhampton, CADRE, 2009), p.10.

17. Annabeth Robinson in Denise Doyle, *Art and the Emergent Imagination in Avatar-Mediated Online Space*, (UEL, 2010), p.255.

18. Lichty, 2009, p.2.

19. Lichty, 2009, p.5.

20. Lichty, 2009, p.2.

21. Lichty, 2009, p.11.

21. During an artist residency at the Eyebeam Gallery, New York, in 2008 Joseph DeLappe experimented with a range of data materialisation processes to produce *MGandhi 1* (8" rapid prototyped 3D print), *MGandhi 2* (15" rapid prototyped 3D print finished in genuine gold leaf, and *MGandhi 3* (17' tall monumental sculpture constructed from cardboard and hot glue).

22. Turlif Vilbrandt is an expert in the field of Digital Materialisation. He is currently undertaking his PhD research at the SMARTlab Digital Media Research Institute, University College Dublin.

22. Denise Doyle, *Kritical Works in SL II*, (Wolverhampton, CADRE, 2009), p.15.

23. Artist interviews in Denise Doyle, *Art and the Emergent Imagination in Avatar-Mediated Online Space* (University of East London, 2010), pp.243-299.

24. Casey, 2000, pp.52.

25. Casey, 2000, p.52.

26. Casey, 2000, p.53.

27. Taey lohe, in Denise Doyle, 2010, p.167.

28. Doreen Massey, Some Times of Space. In Susan May, (Ed.) *Olafur Eliasson: The Weather Report*. (London, Tate Publishing, 2003), p.111.

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